

# MONTANA

## Economy at a Glance

### Introducing R&A's Newest Staff Members

The Research and Analysis Bureau welcomes our newest staff members, Douglas Burtosky and Joe Ruby. Douglas is our new Research Specialist with the Current Employment Statistics (CES) Program. He holds a BS in Chemical Engineering from Montana State University, and a Master's degree from the University of Florida. He has worked as a Quality Engineer and Statistician in the semiconductor, automotive, and computer peripheral industries. Originally from Great Falls, Douglas is enjoying being back in Montana after having lived in one fifth of the 50 states.

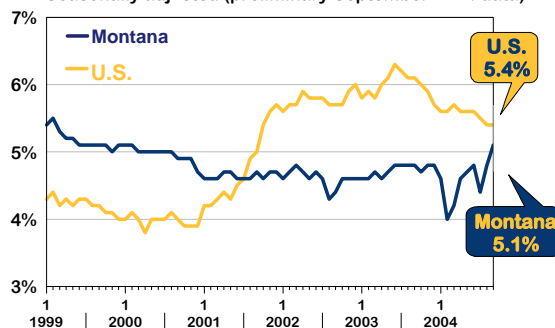
Joe is our new Statistical Technician with the Occupational Employment Statistics (OES) Program. He holds a BA in political science and accounting from Gonzaga University, and a Masters in Divinity from the University of Toronto. Joe has worked as a Customhouse Brokers agent, a high school teacher, and a pastor on reservations and a rural community. He also spent thirteen years in the Jesuits. Born in Great Falls, Joe grew up in Kremlin, Havre, Box Elder, Roundup, and Plentywood, and has since lived in Portland, OR; Spokane, WA; St. Mary's, AK; Omak, WA; and Toronto, Ontario. Joe still enjoys researching political science issues.

### Earnings

Average weekly earnings for Montana's private sector workers dropped from \$438.90 in August to \$424.91 in September. However, this average marks an over-the-year increase of 0.2%. The Consumer Price Index (an indicator of U.S. inflation) increased by 2.5% over-the-year.

### Unemployment

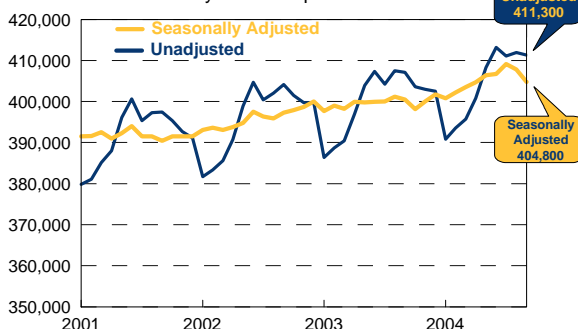
Seasonally adjusted (preliminary September 2004 data)



Montana's seasonally adjusted unemployment rate rose 0.3 percentage points to 5.1% for September, while the U.S. rate held steady at 5.4%.

### Nonfarm Employment Series

January 2001 - September 2004



Montana's seasonally-adjusted, nonagricultural payroll employment was up about 4,300 jobs (1.1%) over the year for September. The largest over-the-year gains were in natural resources and mining, which was up by 1,200 jobs (20.7%); construction, up 1,400 jobs (5.9%); and professional and business services, up 1,200 jobs (3.7%).

### Employment by Industry

Industry Employment (in thousands)	Sept. 2004	Sept. 2003	Net Change	Percent Change
Total Non-Agricultural	404.8	400.5	4.3	1.1%
Natural Resources & Mining	7	5.8	1.2	20.7%
Construction	25.1	23.7	1.4	5.9%
Manufacturing	18.5	18.5	0.0	0.0%
Trade, Transportation, Utilities	84.1	84.5	-0.4	-0.5%
Information*	7.5	7.6	-0.1	-1.3%
Financial Activities	20.9	20.4	0.5	2.5%
Professional & Business Services	33.9	32.7	1.2	3.7%
Education & Health Services	53.4	53.4	0.0	0.0%
Leisure & Hospitality	52.5	51.9	0.6	1.2%
Other Services*	16.8	16.1	0.7	4.3%
Total Government	85.1	85.9	-0.8	-0.9%

\*These series are not seasonally adjusted

### Unemployment by County

Not seasonally adjusted

	Sept. 2004*	Sept. 2003
<b>UNITED STATES</b>	5.1%	5.8%
<b>MONTANA</b>	4.3%	4.0%
Cascade **	4.5%	4.1%
Missoula **	3.7%	3.4%
Yellowstone **	3.6%	3.1%
Beaverhead	2.9%	2.8%
Big Horn	14.5%	12.8%
Blaine	6.2%	4.2%
Broadwater	4.2%	4.3%
Carbon	3.4%	3.1%
Carter	2.1%	1.6%
Chouteau	2.9%	1.8%
Custer	3.3%	1.7%
Daniels	0.7%	0.9%
Dawson	2.7%	1.8%
Deer Lodge	6.2%	4.8%
Fallon	2.7%	1.7%
Fergus	4.0%	3.7%
Flathead	5.2%	6.1%
Gallatin	2.3%	2.1%
Garfield	1.9%	1.3%
Glacier	10.7%	9.4%
Golden Valley	5.3%	4.5%
Granite	5.5%	5.0%
Hill	4.3%	3.3%
Jefferson	4.0%	3.3%
Judith Basin	3.8%	2.5%
Lake	6.2%	5.7%
Lewis & Clark	4.1%	3.0%
Liberty	3.2%	2.2%
Lincoln	11.1%	13.8%
McCone	1.1%	1.2%
Madison	2.3%	2.8%
Meagher	4.4%	3.2%
Mineral	6.5%	8.1%
Musselshell	6.2%	6.7%
Park	3.6%	2.8%
Petroleum	3.1%	3.4%
Phillips	3.1%	2.5%
Pondera	5.9%	4.8%
Powder River	2.5%	1.2%
Powell	5.7%	4.0%
Prairie	2.5%	2.7%
Ravalli	4.8%	4.7%
Richland	3.5%	3.7%
Roosevelt	9.8%	7.8%
Rosebud	6.2%	5.4%
Sanders	7.0%	6.7%
Sheridan	1.7%	2.6%
Silver Bow	4.8%	4.3%
Stillwater	3.0%	3.1%
Sweet Grass	2.6%	2.7%
Teton	3.0%	2.9%
Toole	3.2%	2.5%
Treasure	3.4%	2.2%
Valley	3.2%	2.8%
Wheatland	3.9%	3.1%
Wibaux	2.3%	2.7%

\*September 2004 rate preliminary

\*\* Cascade=Great Falls MSA

Missoula=Missoula MSA

Yellowstone=Billings MSA

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TDD: (406) 444-0532

# Montana Economy at a Glance

## Spotlight on Industry Clusters: Wood-Based Products Cluster

by Robert C. Marvin and Brad Eldredge

Montana is known the world over for its scenic beauty and natural resources. Therefore, it is hardly surprising that the state's largest manufacturing sector depends on its wealth of forest products. In fact, wood products manufacturing has the highest concentration of any manufacturing industry in the state. With a location quotient<sup>1</sup> of 2.96, it is nearly three times as concentrated in Montana as in the United States as a whole. Montana's forestry and logging industry boasts an even higher concentration, with a location quotient of 5.41, or more than five times the concentration of the U.S. The forestry and logging industry has the second highest location quotient in the state (only mining is higher).

### What is Montana's Wood-Based Product Industry Cluster?

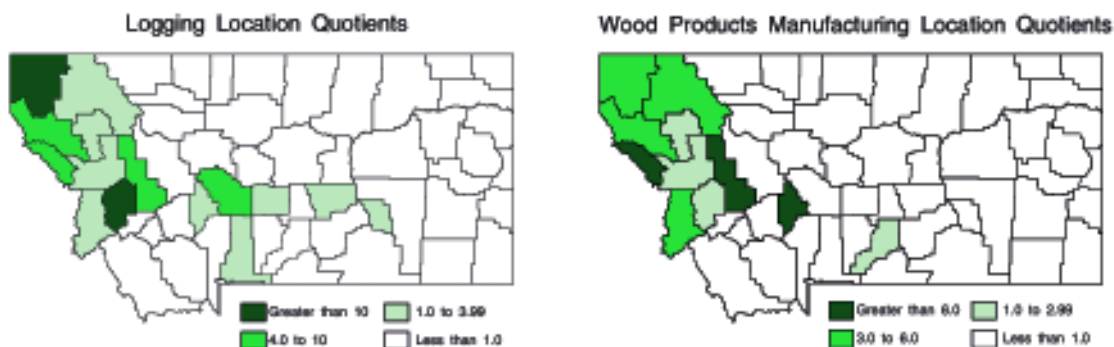
The term "Industry Cluster" describes a concentration of businesses that share common supply chains, markets, technologies, and worker skills. The wood product cluster consists of logging companies and sawmills which harvest and cut the raw materials, as well as the businesses that turn the wood into products, such as log home manufacturers, furniture makers, artists, and paper mills.

### Top High Employment Occupations in the Wood-Based Products Cluster

- 🌲 Sawing Machine Setters, Operators and Tenders, Wood 🌲
- 🌲 Cabinetmakers and Bench Carpenters 🌲
- 🌲 Industrial Truck and Tractor Operators 🌲
- 🌲 Woodworking Machine Setters, Operators, and Tenders, except Sawing 🌲
- 🌲 Logging Equipment Operators 🌲
- 🌲 Laborers and Freight, Stock, and Material Movers, Hand 🌲
- 🌲 First-Line Supervisors/Managers of Production and Operating Workers 🌲
- 🌲 Team Assemblers 🌲
- 🌲 Millwrights 🌲
- 🌲 Machine Feeders and Offbearers 🌲

### Where is Montana's Wood-Based Product Cluster Located?

Unsurprisingly, the northwestern region of the state houses most of the businesses that make up the wood-based product cluster. According to a report by Regional Technology Strategies, Inc. (RTS), three-fourths of Montana's lumber is produced in eight western counties, one-fourth in Flathead County alone.<sup>2</sup> The following maps show that the logging and wood products manufacturing industries are clustered in roughly the same area of the state. Wood product manufacturers tend to locate near the source of their raw materials in order to lower their transportation costs.



<sup>1</sup> Location quotients measure the concentration of an industry's employment relative to the nation as a whole. A location quotient greater than 1 generally indicates that the industry is more concentrated in Montana than in the nation as a whole, while a location quotient less than 1 indicates it is less concentrated.

<sup>2</sup> *Clusters of Creativity: Innovation and Growth in Montana - The Wood-Based Product Cluster*, p. 4

<sup>3</sup> 2003 Annual Averages based on QCEW data.

<sup>4</sup> 2002-2012 Industry Employment Projections

<sup>5</sup> "Montana's Forest Products Industry: Current Conditions and 2004 Forecast," from *Outlook 2004*, pp. 27-8

(continued on back page.)

## PROJECTED MONTANA JOBS BY INDUSTRY, 2002-2012: A PREVIEW

by Phil Brooks, Chief Economist

The future is inherently uncertain or unknown, and thus making projections of industry employment is by its nature, imprecise. Because of this built-in imprecision, all of the projections described below should be interpreted as a general approximation of the true future level of jobs. Nevertheless, because thoughtful present day decisions require estimates of the future, estimates or projections of future employment levels need to be made.

Industry employment projections are potentially useful to private business leaders to get an idea of specific future industry employment levels, which can enhance planning for the future. In addition, business leaders benefit from projections of the overall level of employment. Likewise, public officials (legislators, executive branch leaders, judges) need projections when making decisions regarding the Montana economy and its component industries. Economic development leaders, whether public or private, are another specific group that needs industry projections. Last but not least, industry projections are a primary input to occupational employment projections that are critical for career planning.

What follows is a summary of industry projections for the time period of 2002 to 2012 for about 100 private and public sectors or segments of the Montana economy. Since most job growth involves wage and salary (payroll) jobs, these jobs will be emphasized in this narrative.

Roughly 96,000 net additional jobs (the difference between jobs created and jobs destroyed) are projected for Montana between 2002 and 2012—70,000 of which are estimated to be net new payroll jobs with the remaining 26,000 as net new self-employment jobs. This translates into an average of roughly 10,000 net jobs per year. Some years will exceed this figure and other years will fall short. The yearly growth rate is projected at around 1.6 percent. This compares with 1.5 percent for the nation (U.S. Bureau of Labor Statistics).

Any economy can be divided into the dichotomy of goods-producing sectors (producing a physical product) and service-producing sectors. The employment division between these two categories in Montana and in the U.S. is about 20 percent for the goods-producing segment and 80 percent for service sectors. Partly because of this, most job growth is projected to be in the service sector. In terms of payroll jobs, the largest increases are projected for private education and health services (1,700 per year), leisure and hospitality services (1,500 per year), professional and business services (1,100), and retail trade at about 500 net jobs per year (see the table insert).

Construction is the employment growth engine for the goods-producing segment, with an average yearly increase of 800 net payroll jobs. Construction employment increases are largely related to population growth. All the other major components of the goods-producing segment are projected to decrease. Agriculture and forestry (timber) is forecast to decline by roughly 100 payroll jobs per year. Production agriculture basically has declined in payroll jobs (hired hands) since the introduction of the tractor. Manufacturing

is forecast to decline by roughly 90 jobs per year, following a national trend of a decline in heavy industry jobs. The last component of the goods-producing sector, mining, is projected to decline yearly on average by about 75 net jobs. All segments of mining are forecast to decline after a temporary increase in 2004 and 2005.

More details are available on our website:

[ourfactsyourfuture.org](http://ourfactsyourfuture.org)

MONTANA JOBS BY INDUSTRY, 1992, 2002, 2003, & PROJECTED 2012		ANNUAL AVERAGE JOBS 1992	ANNUAL AVERAGE JOBS 2002	ANNUAL AVERAGE JOBS 2003	PROJECTED ANNUAL JOBS 2012	AVERAGE JOB CHANGE 2002--12	ANNUAL GROWTH RATE 2002--12
NAICS CODE*	INDUSTRY						
11	AGRICULTURE, FORESTRY, FISHING, HUNTING, TRAPPING	7,871	8,114	7,290	7,119	-100	-1.3%
21	MINING INCLUDING OIL AND GAS	5,669	5,098	4,959	4,361	-74	-1.5%
22	UTILITIES	3,702	2,912	2,815	2,823	-9	-0.3%
23	CONSTRUCTION	12,848	21,530	23,186	29,566	804	3.2%
31-33	MANUFACTURING	19,866	19,968	19,012	19,045	-92	-0.5%
42	WHOLESALE TRADE	13,825	15,351	15,435	16,487	114	0.7%
44-45	RETAIL TRADE	44,377	53,798	53,618	59,036	524	0.9%
48-49	TRANSPORTATION	11,989	12,684	12,453	13,444	76	0.6%
51	INFORMATION	6,343	7,781	7,673	7,960	18	0.2%
52-53	FINANCIAL ACTIVITIES INCLUDING REAL ESTATE	14,513	19,375	20,075	22,975	360	1.7%
54-56	PROFESSIONAL AND BUSINESS SERVICES	16,909	31,988	32,674	43,372	1,138	3.1%
61-62	PRIVATE EDUCATION AND HEALTH SERVICES	37,244	52,386	52,897	69,495	1,711	2.9%
71-72	LEISURE AND HOSPITALITY	38,628	50,803	52,223	66,183	1,538	2.7%
81	OTHER PRIVATE SERVICES	12,850	16,187	16,270	18,676	249	1.4%
	FEDERAL GOVERNMENT	13,542	13,783	14,020	13,796	1	0.0%
	STATE GOVERNMENT	21,800	24,300	24,800	26,942	264	1.0%
	LOCAL GOVERNMENT	41,841	46,615	47,319	51,192	458	0.9%
	<b>TOTAL WAGE AND SALARY JOBS</b>	<b>323,817</b>	<b>402,673</b>	<b>406,719</b>	<b>472,473</b>	<b>6,980</b>	<b>1.6%</b>

\*North American Industry Classification System Code

Source: Research & Analysis Bureau, Montana Dept. of Labor and Industry

## Wood-Based Product Industry Cluster (continued)

### What is Employment like in Wood-Based Product Cluster Industries?

Employment in the wood products manufacturing sector totaled 4,804 in 2003, while the logging industry employed 1,123<sup>3</sup>. Employment in both wood products manufacturing and logging is expected to decline over the next several years, with 2012 employment projected at 4,519 manufacturing jobs and 881 jobs in forestry and logging.<sup>4</sup> These projections reflect the continuation of a long-standing trend. According to a recent analysis by Charles E. Keegan, et al. at the Bureau of Business & Economic Research, employment in Montana's forest products industry peaked in the mid-1970's and has been on a more or less downward slope ever since. The analysis also shows that Montana's total timber harvest has been declining since the early 1980's.<sup>5</sup>

#### Top 5 High Employment Industries in the Wood-Based Products Cluster

1. Sawmills, Planing Mills .....	3,109 jobs
2. Logging .....	1,249 jobs
3. Paper, Cardboard Manufacturing .....	622 jobs
4. Wood Products Manufacturing .....	601 jobs
5. Log Home Manufacturing .....	581 jobs

#### Top 10 High Wage Occupations\* in the Wood-Based Products Cluster

1. Foresters .....	\$24.80/hr.
2. Fallers .....	\$22.09/hr.
3. Electricians .....	\$21.20/hr.
4. Industrial machinery mechanics .....	\$18.66/hr.
5. Sales representatives .....	\$17.94/hr.
6. Operating engineers & other construction equipment operators .....	\$17.13/hr.
7. Tool grinders, filers & sharpeners .....	\$16.15/hr.
8. Logging equipment operators .....	\$15.89/hr.
9. Carpenters .....	\$15.22/hr.
10. Truck drivers, heavy & tractor trailer .....	\$15.16/hr.

\*Listed wages represent state averages across all industries.

#### Contributors:

Kitty Cutting: OES Data, Phil Brooks: 2002-2012 job projections, Tina Hash: Location Quotient Explanation.

To read RTS's report on Montana's wood product cluster, go to:  
[www.rtsinc.org/publications/Montana%20Wood.pdf](http://www.rtsinc.org/publications/Montana%20Wood.pdf).

For more information on Montana wood products and related businesses, visit:  
[www.matr.net/news.phtml?cat\\_id=41&catlabel=Wood-Based+Products+Cluster](http://www.matr.net/news.phtml?cat_id=41&catlabel=Wood-Based+Products+Cluster).

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